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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/747,257	12/22/2000	Terry D. Little	0325.00386	2702
21363	7590	02/11/2005	EXAMINER	
CHRISTOPHER P. MAIORANA, P.C.			TSE, YOUNG TOI	
24840 HARPER			ART UNIT	
ST. CLAIR SHORES, MI 48080			PAPER NUMBER	
			2637	

DATE MAILED: 02/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/747,257

Applicant(s)

LITTLE ET AL.

Examiner

YOUNG T. TSE

Art Unit

2637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 28 October 2004 have been fully considered but they are not persuasive.

Applicants argue that the patent office printing office does not print the section heading on the issued patent, but rather uses their own heading. Therefore, changing the heading is moot and the objection should be withdrawn.

If applicants know the claims heading by the patent office printing office, the Applicants are suggested to use the section heading on the issued patent to amend the heading "CLAIMS" in the specification.

Applicants also argue that the rejection of claims 1-20 under 35 U.S.C. 112, first Paragraph should be withdrawn because the co-pending cases cited in this application had similar backgrounds and did not reject by other examiners.

The present invention discussed in the specification and shown in Figures 3 and 4 is the improvement over the prior art Figure 1 of the instant application. Since the block elements shown in Figures 3 and 4 of the present invention are so close the elements shown in the prior art Figure 1 of the instant application. It is necessary to clarify the difference between the present invention and the prior art in order to enable a person skill in the art to understand the present invention.

### ***Drawings***

2. The drawings were received on 28 October 2004. These drawings are acceptable.
3. The drawings are objected to because the block element 130 labeled "CODER" in Figure 4 should be labeled "ENCODER" and the input clocks "A(FALL)" input to both the registers 4 and 5 appear to read "B(RISE)" as mentioned in the specification. Also see the original filed Figure. Further, in Figure 6, the positive statement "YES" is not shown in the output of block element 216. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be

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labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

4. The disclosure is objected to because of the following informalities: Applicants fail to describe every block elements or the operation of the prior art Figures 1-2 and Figure 5 of the present invention in the specification in order to enable one of ordinary skill in the art to understand the difference the present and the prior art; for the formality of the application under the present office practice, applicant(s) is required to replace "Claims" with "I or We Claim", "The Invention Claimed Is" (or the equivalent) before the Claims part of the specification of the instant application. See MPEP 608.01(m). Appropriate correction is required.

***Claim Objections***

5. Claims 1-11 and 16 are objected to because of the following informalities:

In claim 1, line 5, "said position" should be "said position of said first edge"; line 6, "if said first edge" should be "if said position of said first edge"; line 10, "a position" should be "said position"; and lines 15-16, "the result of step (F)" should be "said third value".

In claim 2, line 4, "adjust" should be "adjusting".

In claim 3, line 5, "said zone" should be "said predetermined zone" since a zone was recited in claim 1.

In claim 10, line 3, "a phase offset" should be "phase offset".

Wherein the dependent claims 4-9 and 11 depend upon claim 1.

In claim 16, line 4, "said value" should be "said first value".

Appropriate correction is required.

6. Claims 9 and 10 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The determining step recited in both claim 9 and claim 10 lacks cooperation or connection with the step(s) of claim 1.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Applicants fails to describe the block elements or the operation of the prior art Figures 1-2 and Figure 5 of the present invention in order to enable one of ordinary skill in the art to understand the difference between the present and the prior art which may apply to the present invention of claims.

Further, the configuration of claims 1-13 and 15-20 seems not correspond to the disclosure the drawings as shown in Figure 4 of the present invention because it is unclear as shown in Figure 4 or discussed in the specification exactly which signals from the block elements are considered as the first, the second, the third, and the predetermined values.

9. Claims 12-13 and 15-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 12-13 and 15-20 are considered as new matter because the original claim 12 does not include the combined of the original steps (A) and (B) plus the additional step (C) for adding a first value to a second value to produce a third value, wherein said second value represents a position of a second edge of said data signal and the original claim 13 does not include the limitation of wherein the detector comprises an accumulator that adds a first value to a second value to produce a third value, wherein said second value represents a position of a second edge of said data signal as amended on page 20, after line 15 in the specification.

Further, in Figure 4, which block elements are the adder and the comparator as recited in claims 17 and 18.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 12-13 and 15-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The preamble of claims 12 and 13 recites a method or apparatus for synchronizing a clock signal to a data signal. However, the body of claims 12 and 13 does not include the clock signal.

Further, the newly added claimed subject matter of claims 12 and 13 lacks cooperation or connection with steps (A) and (B) or the high bandwidth system and the low bandwidth system.



In claim 18, the look ahead circuit also lacks cooperation or connection with the comparator.

### ***Conclusion***

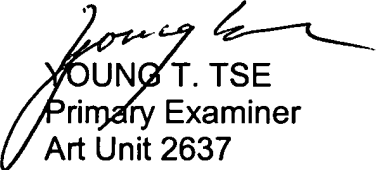
12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOUNG T. TSE whose telephone number is (571) 272-3051. The examiner can normally be reached on Monday and Wednesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
YOUNG T. TSE  
Primary Examiner  
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